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**Blum et al.**

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(54) **EYEWEAR DOCKING STATION AND ELECTRONIC MODULE**

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(58) **Field of Classification Search**

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See application file for complete search history.

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(56) **References Cited**

U.S. PATENT DOCUMENTS

2,437,642 A 3/1948 Henroleau  
2,576,581 A 11/1951 Edwards

(Continued)

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FOREIGN PATENT DOCUMENTS

CN 89113088 10/2001  
CN 2911723 Y 6/2007

(Continued)

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OTHER PUBLICATIONS

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(57)

**ABSTRACT**

An eyewear system including an eyewear frame and an application module. The eyewear frame including a docking station, and an electronic connector including a first set of pre-configured application connection points. The application module adapted to be mounted to the docking station, and including an electronic device configured to perform a function, and a second set of preconfigured application connection points corresponding to at least some of the first set of pre-configured application connection points. The second set of preconfigured application connection points including at least two different sub-function connections used to support the function of the electronic device.

(51) **Int. Cl.**

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(52) **U.S. Cl.**

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**21 Claims, 15 Drawing Sheets**

